



# QuietR<sup>®</sup> Duct Liner Board And HD-Roll Installation Instructions

## Installation

- All portions of duct designated to receive duct liner shall be completely covered with QuietR<sup>®</sup> Duct Liner Board or HD-Roll, adhered to the sheet metal with 90% coverage of adhesive complying with ASTM C 916. Transverse joints shall be neatly butted and there shall be no interruptions or gaps. All transverse joints shall be edge coated. Metal nosing on leading edges must be used where duct liner is preceded by unlined metal, and on all upstream edges when velocity exceeds 4,000 fpm (20.3 m/s). The black faced surface of the duct liner shall face the airstream.
- QuietR<sup>®</sup> Duct Liner Board or HD-Roll shall also be secured with mechanical fasteners, either impact-driven or weldsecured, which shall compress the duct liner sufficiently to hold it firmly in place. For fastener spacing see Figure 1.
- QuietR<sup>®</sup> Duct Liner Board or HD-Roll shall be cut to assure tight, overlapped corner joints. The top pieces shall be supported at the edges by the side pieces.
- Minor damage and small tears may be repaired by coating with adhesive.
- After installation, and prior to occupancy, blow out duct system to remove any cutting scraps or foreign material remaining in the duct.

## Multiple Layer Installation Instructions

Installing two layers of material to meet a specific liner thickness is not recommended. If the specification forces the use of multiple layers, the following steps must be taken:

- Adhere bottom layer of duct liner to duct in normal manner.
- Adhere top layer to bottom layer of liner using a minimum of 90% adhesive coverage.
- Treat leading edges with metal nosings to prevent separation of the two layers.
- Use mechanical fasteners of the proper length for double layers.

## Other Considerations

To avoid contact with liquid water, duct liner should be protected with a sheet metal sleeve and drip pan adjacent to equipment such as evaporative coolers, humidifiers, cooling coils and outside intakes. When duct systems run through unconditioned space and are used for cooling only, register openings must be tightly sealed to help prevent water vapor accumulation in the system during the heating season.

- When duct liners are used in systems supplying hospital operating rooms, delivery rooms, recovery rooms, nurseries, isolation rooms and intensive care units, terminal filters of at least 90% efficiency should be installed downstream of lined ducts.
- Lined ductwork supplying clean rooms should have terminal filtration of the efficiency required for the particular class of clean room.
- To avoid damage to the duct liner due to physical abuse caused by maintenance personnel working in accessible plenums, some means of duct liner protection must be employed.
- To prevent itching and short-term irritation to skin and eyes, normal work clothing (long-sleeved shirts, long pants, gloves, and safety glasses) is recommended. In addition, use a properly fitted and approved disposable dust respirator when installing or removing this product in poorly ventilated spaces, when fabrication involves power tools, or in any dusty environment.

Figure 1

